AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   **(Original)** A free fall simulator, characterized in that it comprises:

-        a lower compression chamber (22):

-        in the vicinity of whose lower periphery there open the outlets of a plurality of fans (24) arranged in a centripetal configuration, and

-        in whose upper tapered part there is placed a compression grid (30);

-        a cylindroid chamber (36) delimiting a maneuvering space, which is located immediately above the compression chamber (22), and which is designed to be traversed by a homogenous flow of rising air having a speed gradient decreasing regularly from the bottom to the top; and

-        a generally cylindrical superstructure which encloses at least the maneuvering chamber (14) of the simulator, which terminates in its upper part in a dome (12) which covers said maneuvering chamber of the simulator, and which is arranged to promote a downward circulation of the air leaving the maneuvering chamber toward the fan inlets.

2.   **(Original)** The simulator as claimed in claim 1, characterized in that the inner surface of the compression chamber is shaped to generate a homogeneous air flow to ensure the stability of the operator in the maneuvering chamber.

3-23   **(Cancel)**